

What is claimed is:

1. An emulsion polymer composition containing an emulsion stabilizing effective quantity of the branched polymer reaction product of A) at least one epihalohydrin or trihaloalkane, and B) at least one alkoxyated alcohol, wherein the mole ratio of components A) to component B) is from about 0.60:1 to about 2:1.
2. The emulsion polymer composition of claim 1 wherein said mole ratio is from about 0.8:1 to about 2:1.
3. The emulsion polymer composition of claim 1 wherein said stabilizing-effective quantity is in the range of from about 0.1 to about 5.0% by weight, based on solids.
4. The emulsion polymer composition of claim 1 wherein the epihalohydrin is epichlorohydrin.
5. The emulsion polymer composition of claim 1 wherein said reaction product is the product of the base catalyzed reaction of
  - A) at least one compound of formula I



wherein each X group is a halogen atom or one X group is a halogen atom and two X groups with two adjacent carbon atoms in the R<sup>1</sup> group and

an oxygen atom from an epoxy group, and  $R^1$  is an alkanetriyl group containing from 3 to 10 carbon atoms; and

B) at least one compound of formula II



wherein  $R$  is a saturated or unsaturated aliphatic group having from 3 to 22 carbon atoms,  $n$  is a number of from 1 to 50, and  $m$  is a number from 0 to 10.

6. The emulsion polymer composition of claim 5 wherein the mole ratio of component A) to component B) is from about 0.8:1 to about 2:1.
7. The emulsion polymer composition of claim 5 which is a vinyl acrylic emulsion polymer composition.
8. The emulsion polymer composition of claim 5 wherein in said reaction product component A) is epichlorohydrin.
9. The emulsion polymer composition of claim 5 wherein in said reaction product component A) is a trichloroalkane.
10. The emulsion polymer composition of claim 5 wherein in said reaction product  $R$  in component B) is an alkyl group.

11. The emulsion polymer composition of claim 5 wherein in said reaction product  $n$  in component B) is from 3 to about 50 and  $m$  is zero.
12. The emulsion polymer composition of claim 5 wherein the degree of polymerization of said reaction product is from about 2.0 to about 6.0.
- 5 13. The emulsion polymerization composition of claim 5 wherein the composition also contains at least one other emulsifier.
- 10 14. A method of stabilizing an emulsion polymer composition comprising adding to an emulsion polymerization composition prior to carrying out the emulsion polymerization an emulsion-stabilizing quantity of a branched polymeric reaction product of: A) at least one epihalohydrin or trihaloalkane and B) at least one alkoxyated alcohol, wherein the mole ratio of component A) to component B) is from about 0.60:1 to about 2:1.
- 15 15. A method of stabilizing an emulsion polymer composition comprising adding to an emulsion polymerization composition subsequent to carrying out the emulsion polymerization an emulsion-stabilizing quantity of a branched polymeric reaction product of: A) at least one epihalohydrin or trihaloalkane and B) at least one alkoxyated alcohol, wherein the mole ratio of component A) to component B) is from about 0.60:1 to about 2:1.

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